

### § 13.19

(e) A licensee who has made application for a replacement license may exhibit a copy of the application submitted to the FCC or a photocopy of the license in lieu of the original document.

### § 13.19 Operator's responsibility.

(a) The operator responsible for maintenance of a transmitter may permit other persons to adjust that transmitter in the operator's presence for the purpose of carrying out tests or making adjustments requiring specialized knowledge or skill, provided that he or she shall not be relieved thereby from responsibility for the proper operation of the equipment.

(b) In every case where a station operating log or service and maintenance log is required, the operator responsible for the station operation or maintenance shall make the required entries in the station log. If no station log is required, the operator responsible for service or maintenance duties which may affect the proper operation of the station shall sign and date an entry in the station maintenance records giving:

(1) Pertinent details of all service and maintenance work performed by the operator or conducted under his or her supervision;

(2) His or her name and address; and

(3) The class, serial number and expiration date of the license when the FCC has issued the operator a license, or the PPC serial number(s) and date(s) of issue when the operator is awaiting FCC action on an application.

(c) When the operator is on duty and in charge of transmitting systems, or performing service, maintenance or inspection functions, the license or permit document, or a photocopy thereof, or a copy of the application and PPC(s) received by the FCC, must be posted or in the operator's personal possession, and available for inspection upon request by a FCC representative.

(d) The operator on duty and in charge of transmitting systems, or performing service, maintenance or inspection functions, shall not be subject to the requirements of paragraph (b) of this section at a station, or stations of one licensee at a single location, at which the operator is regularly em-

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ployed and at which his or her license, or a photocopy, is posted.

[58 FR 9124, Feb. 19, 1993, as amended at 60 FR 27700, May 25, 1995]

### EXAMINATION SYSTEM

### § 13.201 Qualifying for a commercial operator license or endorsement.

(a) To be qualified to hold any commercial radio operator license, an applicant must have a satisfactory knowledge of FCC rules and must have the ability to send correctly and receive correctly spoken messages in the English language.

(b) An applicant must pass an examination for the issuance of a new commercial radio operator license, other than the Restricted Radiotelephone Operator Permit and the Restricted Radiotelephone Operator Permit-Limited Use, and for each change in operator class. An applicant must pass an examination for the issuance of a new Ship Radar Endorsement. Each application for the class of license or endorsement specified below must pass, or otherwise receive credit for, the corresponding examination elements:

(1) First Class Radiotelegraph Operator's Certificate.

(i) Telegraphy Elements 3 and 4;

(ii) Written Elements 1, 5, and 6;

(iii) Applicant must be at least 21 years old;

(iv) Applicant must have one year of experience in sending and receiving public correspondence by radiotelegraph at a public coast station, a ship station, or both.

(2) Second Class Radiotelegraph Operator's Certificate.

(i) Telegraphy Elements 1 and 2;

(ii) Written Elements 1, 5, and 6.

(3) Third Class Radiotelegraph Operator's Certificate.

(i) Telegraphy Elements 1 and 2;

(ii) Written Elements 1 and 5.

(4) General Radiotelephone Operator License: Written Elements 1 and 3.

(5) Marine Radio Operator Permit: Written Element 1.

(6) GMDSS Radio Operator's License: Written Elements 1 and 7.

(7) GMDSS Radio Maintainer's License: Written Elements 1, 3, and 9.

(8) Ship Radar Endorsement: Written Element 8.

[58 FR 9124, Feb. 19, 1993, as amended at 59 FR 3795, Jan. 27, 1994]

**§ 13.203 Examination elements.**

(a) A written examination (written Element) must prove that the examinee possesses the operational and technical qualifications to perform the duties required by a person holding that class of commercial radio operator license. Each written examination must be comprised of a question set as follows:

(1) Element 1 (formerly Elements 1 and 2): Basic radio law and operating practice with which every maritime radio operator should be familiar. 24 questions concerning provisions of laws, treaties, regulations, and operating procedures and practices generally followed or required in communicating by means of radiotelephone stations. The minimum passing score is 18 questions answered correctly.

(2) Element 3: General radio-telephone. 76 questions concerning electronic fundamentals and techniques required to adjust, repair, and maintain radio transmitters and receivers at stations licensed by the FCC in the aviation, maritime, and international fixed public radio services. The minimum passing score is 57 questions answered correctly.

(3) Element 5: Radiotelegraph operating practice. 50 questions concerning radio operating procedures and practices generally followed or required in communicating by means of radiotelegraph stations primarily other than in the maritime mobile services of public correspondence. The minimum passing score is 38 questions answered correctly.

(4) Element 6: Advanced radiotelegraph. 100 questions concerning technical, legal and other matters applicable to the operation of all classes of radiotelegraph stations, including operating procedures and practices in the maritime mobile services of public correspondence, and associated matters such as radio navigational aids, message traffic routing and accounting, etc. The minimum passing score is 75 questions answered correctly.

(5) Element 7: GMDSS radio operating practices. 76 questions concerning GMDSS radio operating procedures and practices sufficient to show detailed practical knowledge of the operation of all GMDSS sub-systems and equipment; ability to send and receive correctly by radio telephone and narrow-band direct-printing telegraphy; detailed knowledge of the regulations applying to radio communications, knowledge of the documents relating to charges for radio communications and knowledge of those provisions of the International Convention for the Safety of Life at Sea which relate to radio; sufficient knowledge of English to be able to express oneself satisfactorily both orally and in writing; knowledge of and ability to perform each function listed in §80.1081; and knowledge covering the requirements set forth in IMO Assembly Resolution on Training for Radio Personnel (GMDSS), Annex 3. The minimum passing score is 57 questions answered correctly.

(6) Element 8: Ship radar techniques. 50 questions concerning specialized theory and practice applicable to the proper installation, servicing and maintenance of ship radar equipment in general use for marine navigational purposes. The minimum passing score is 38 questions answered correctly.

(7) Element 9: GMDSS radio maintenance practices and procedures. 50 questions concerning the requirements set forth in IMO Assembly on Training for Radio Personnel (GMDSS), Annex 5 and IMO Assembly on Radio Maintenance Guidelines for the Global Maritime Distress and Safety System related to Sea Areas A3 and A4. The minimum passing score is 38 questions answered correctly.

(b) A telegraphy examination (telegraphy Elements) must prove that the examinee has the ability to send correctly by hand and to receive correctly by ear texts in the international Morse code at not less than the prescribed speed, using all the letters of the alphabet, numerals 0-9, period, comma, question mark, slant mark, and prosigns *AR*, *BT*, and *SK*.

(1) Telegraphy Element 1: 16 code groups per minute.